

**Request for Bids**  
**Water/Wastewater Treatment Chemicals**

The City of Bismarck, North Dakota is requesting bids for the supply of bulk pebbled quicklime, sodium aluminate, phosphate corrosion inhibitor, chlorine gas, sulfur dioxide gas, ferric chloride, fluorosilicic acid, powdered activated carbon, and liquid carbon dioxide for calendar year 2014. Bids will be received by the Board of City Commissioners of the City of Bismarck, in the office of the City Administrator, until three (3:00) o'clock p.m., Monday, November 25, 2013. Bids will be publicly opened and reviewed at four (4:00) o'clock p.m., on Monday, November 25, 2013.

The proposals must be mailed to the City Administrator (PO Box 5503, Bismarck ND 58506-5503) or otherwise deposited with the City Administrator (221 N 5th Street, Bismarck ND) and shall be sealed and endorsed "Chemical Supply Bids".

Bids must be submitted on blanks furnished by the City of Bismarck and in accordance with specifications and conditions therein contained. Copies of proposal blanks and specifications may be obtained from the Director of Utility Operations (PO Box 5503, Bismarck, ND 58506-5503) or by calling (701) 355-1700.

All bidders are invited to be present at the opening of the proposals.

The right is reserved to hold all bids for a period of thirty (30) days, to reject any and all bids, to waive technicalities or to accept such as may be determined to be in the best interest of the City of Bismarck.

***City of Bismarck***

W.C. Wocken  
City Administrator

Dated this 29th day of October, 2013

## GENERAL SPECIFICATIONS

1. Proposals may be rejected if they show any alteration of form, additions not called for, conditional or alternate bids, incomplete bids, irregularities of any kind or if they contain a clause in which the bidder reserved the right to accept or reject a contract awarded to him. Proposals in which the prices are obviously unbalanced or proposals otherwise regular which are not accompanied by a satisfactory proposal guarantee will be rejected.
2. The right is reserved to cancel any and all awards under this letting for the failure to make delivery within ninety (90) days due to the properties or any other reason.
3. In the event of a conflict between General Conditions and the Detailed Specifications, the latter will govern.
4. Purchases by the City of Bismarck are not subject to the North Dakota State Sales Tax.
5. The award will be made on the basis of the lowest and best bid. In general, the City will select the product that results in the lowest unit cost of available active ingredient.
6. The unit price shall be for chemicals delivered to the Bismarck Water or Wastewater Treatment Plant, unloaded by the supplier.
7. The unit price bid shall reflect the total cost of the chemical. No additional charges or surcharges will be allowed during the life of the contract. A bidder may also submit a proposal for a fixed product cost with a variable freight cost where the freight cost is tied to a verifiable price index. Proposals may also be submitted for a variable product cost tied to a verifiable price index. Details of any variable price bids shall be included in the bid package and shall contain enough information to identify the product price and index value at the time of bid submittal.
8. **Note that bid price for phosphate blend is on the basis of “pound of available phosphate”, not total product weight.**

## **SPECIAL CONDITIONS**

1. Chemicals furnished must meet ANSI/NSF Standard 60 and equal or exceed the requirements of the Technical Specifications. Each bidder shall provide a typical product analysis data sheet and proof of ANSI/NSF Standard 60 certification with their bid. The product analysis data sheet shall at a minimum include the following:

Trade name of product  
Name of source and supplier  
Chemical composition and percentage of impurities

2. Each delivered load of product shall be accompanied by a Material Safety Data Sheet, proof of NSF Standard 60 certification, a certified product analysis and a scale ticket showing the weight of product.
3. The supplier shall provide the City with a contact name and phone number for ordering, and an emergency phone number for 24-hour service.
4. The supplier shall provide the City with the anticipated delivery time when an order is placed.
5. The City reserves the right to have any load tested by an independent laboratory.
6. Product shall be delivered on Monday through Friday between the hours of 8:00 am and 3:30 pm at the Water Treatment Plant and 8:00 am and 3:30 pm at the Wastewater Treatment Plant, unless satisfactory prior arrangements are made with plant supervisors or a designated representative.
7. The City reserves the right to reject any load, at no cost to the City, for any of the following reasons:
  - a. The load does not have NSF Standard 60 certification.
  - b. The load is not accompanied by a certified product analysis data sheet.
  - c. The load is not accompanied by a scale ticket showing the weight of product.
  - d. The load does not meet the minimum physical or chemical requirements of the Technical Specifications.
  - e. The load is not delivered in a properly sealed container, as required.

8. The purchase agreement may be terminated by the City for the following causes, subject to 30 days written notice to the supplier.
  - a. The rejection of two loads in succession when the supplier has not rectified the problem within 30 days of written notification.
  - b. Failure of product to meet the Technical Specification, based on the supplier's analysis or the analysis of an independent testing lab, which is not corrected by the supplier within 30 days of notice. A second such notice will be grounds for final termination.
  - c. Failure of the supplier to provide requested technical service or support within 30 days of notice of deficiency in service.
  - d. Any Federal, State, or local administrative, legislative or regulatory action which prohibits or restricts the use of the product for potable water.
9. The City reserves the right to obtain these products from other sources if the supplier can not deliver the product in a timely manner such that the delay would adversely affect plant operation or product quality.
10. All responders will be expected to honor their bids regardless of market conditions. A successful bidder that fails to honor their contract price for the full one year term may be prohibited from bidding in subsequent years.

## TECHNICAL SPECIFICATIONS

### Pebbled Quicklime

**Quantity of Product** (estimated) 2000 Tons

**Quality:** Quicklime shall meet requirements of AWWA Standard B202-07.

**Calcium Oxide:** No less than 85% calcium oxide available. Available CaO shall be determined by the rapid sugar method as specified in Section 5.3.2 of AWWA B202-07. Bidder shall report the minimum CaO that they will guarantee for their product.

**Insoluble Material:** No more than 5% (by weight) when tested in accordance with Section 5.5 of AWWA B202-02.

**Gradation:** No larger than  $\frac{3}{4}$ " and not more than 5% passing a No. 100 Standard sieve (to be certified at time of loading).

**Delivery:** Product shall be delivered via truck, with loads of no more than 65,000 pounds. Product shall be pneumatically unloaded into the plant's silo using the supplier's equipment. Pressure shall not exceed 8 psi when unloading lime into the plant silo.

**Price:** Bid price shall be per ton of pebbled quick lime. Bid award will be determined by price per ton of available CaO that is guaranteed.

### Liquid Carbon Dioxide

**Quantity of Product** (estimated) 450 Tons

**Quality:** Liquid carbon dioxide shall meet requirements of AWWA Standard B510-12.

**Purity:** No less than 99.5% carbon dioxide. No more than 120 parts per million (ppm) of water. Shall be free of foreign odors and shall not contain any substance in quantities detrimental to water quality.

**Dew Point:**  $-40^{\circ}\text{F}$ .

**Delivery:** Product shall be delivered via truck equipped to meter the delivered amount. Supplier must provide any equipment and labor needed to deliver product to the plant's storage tank. An account summary shall be provided to the plant on a quarterly basis for verification of delivered amounts.

**Price:** Bid price shall be per ton of liquid carbon dioxide.

### Liquid Sodium Aluminate

**Quantity of Sodium Aluminate solution** (estimated) 140 Tons

**Quality:** Liquid sodium aluminate shall meet requirements of AWWA Standard B405-06. Product shall contain a minimum of 32% available sodium aluminate and a maximum of 35% available sodium aluminate.

**Insoluble Material:** No more than 0.5% (by weight) when tested in accordance with Section 5 of AWWA Standard B405-00.

**Delivery:** Product shall be delivered via truck and transferred to the Water Treatment Plant storage tanks using the supplier's equipment. Loads shall be sealed at the time of the loading at the point of origin and unsealed in the presence of Bismarck Water Treatment Plant personnel at the time of delivery. No additional payment will be made for time to unload trucks. Suppliers are advised to adequately heat the product to avoid excessive unloading times.

**Price:** Bid price shall be per ton of sodium aluminate solution product.

### Liquid Phosphate Blend

**Quantity of Available Phosphate** (estimated) 70,000 pounds

**Quality:** Liquid phosphate mixture shall consist of 40% polyphosphate and 60% orthophosphate and shall meet the requirements of all applicable AWWA Standards. **Product shall contain a maximum of 35% active ortho/polyphosphate blend.**

**Delivery:** Product shall be delivered via truck and transferred to the Water Treatment Plant storage tanks using the supplier's equipment. Loads shall be sealed at the time of the loading at the point of origin and unsealed in the presence of Bismarck Water Treatment Plant personnel at the time of delivery.

The Plant has two storage tanks each holding 450 gallons.

**Price:** Bid price shall be per pound of available poly-orthophosphate, as PO<sub>4</sub>.

### Powdered Activated Carbon

**Quantity of Product** (estimated) 25,000 lbs

**Quality:** Powdered Activated Carbon (PAC) shall meet requirements of AWWA Standard B600-05 with a minimum iodine number of 800 mg/g.

**Delivery:** Product shall be delivered to the water plant via truck, in bags weighing no more than 50 lbs. An alternate bid is included for bags with a maximum weight of 35 pounds. Bags shall be palletized for unloading with the plant's pallet jack/fork lift. Pallets shall be stacked in a manner that allows them to be unloaded with a pallet jack. The City will reject any pallets that cannot be unloaded with a pallet jack. Bags shall not be stacked more than 6 feet high on pallets.

**Price:** Bid price shall be per pound of powdered activated carbon.

### Fluorosilicic Acid

**Quantity of Product** (estimated) 30 Tons

**Quality:** Fluorosilicic acid shall meet requirements of AWWA Standard B703-06. Product shall be clean and free of visible suspended matter. Product shall contain between 20 and 30 percent fluorosilicic acid by weight.

**Delivery:** Product shall be delivered via truck and transferred to the Water Treatment Plant storage tanks using the supplier's equipment. Loads shall be sealed at the time of the loading at the point of origin and unsealed in the presence of Bismarck Water Treatment Plant personnel at the time of delivery.

The plant has one storage tank holding 450 gallons.

**Price:** Price bid shall be per pound of product.

## Liquid Chlorine

**Quantity of Product** (estimated) 75 Tons

**Quality:** Liquid chlorine shall meet requirements of AWWA Standard B301-04.

**Purity:** No less than 99.5% chlorine. No more than 50 parts per million (ppm) of water.

**Delivery:** Product shall be delivered in 1-Ton net weight containers. Supplier must provide any equipment and labor needed to unload containers so they are accessible by plant's hoist. No deposit will be paid on chlorine containers. If demurrage charges apply, terms shall be included in bid proposal.

Chlorine delivery will be coordinated with plant staff at the water and wastewater treatment plants. Maximum single delivery at either plant will be 4 containers.

**Price:** Bid price shall be per pound of chlorine.

## Sulfur Dioxide

**Quantity of Sulfur Dioxide** (estimated) 9000 pounds

**Quality:** Sulfur dioxide shall meet requirements of AWWA Standard B512-08.

**Purity:** No less than 99.9 % sulfur dioxide by weight. No more than 100 parts per million (ppm) of water.

**Delivery:** Product shall be delivered in 150-lb net weight cylinders. Supplier must provide any equipment and labor needed to unload cylinders. No deposit will be paid on cylinders. If demurrage charges apply, terms shall be included in bid proposal.

Sulfur dioxide delivery will be coordinated with wastewater treatment plant staff. Maximum delivery will be 10 cylinders.

**Price:** Bid price shall be per pound of sulfur dioxide.



## Liquid Ferric Chloride

**Quantity of Ferric Chloride solution** (estimated) 100,000 gallons

**Quality:** Shall meet the requirements of AWWA Standard B407-05. Product shall contain 33-36% ferric chloride. Free acid expressed as HCl shall not exceed 1.0%. The solution shall not contain more than 0.2 % total insoluble matter by weight.

**Delivery:** Product shall be delivered via truck and transferred to the Wastewater Treatment Plant storage tanks using the supplier's equipment. The plant has two 2000 gallon storage tanks. The maximum quantity for one delivery will be 2000 gallons. Delivery is to be coordinated with the plant supervisor.

**Price:** Bid price shall be per gallon of ferric chloride solution.

## PROPOSAL

To the Honorable Board of City Commissioners  
Bismarck, North Dakota

\_\_\_\_\_, 2013

We the undersigned agree to furnish to the City of Bismarck the following chemical for calendar year 2014, according to the General and Special Conditions and Technical Specifications at the bid prices listed below:

<u>Description</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Extended Price</u>
Pebbled Quicklime (min CaO guarantee _____%)	2000 Tons	_____	_____
Liquid Carbon Dioxide	450 Tons	_____	_____
Sodium Aluminate	140 Tons	_____	_____
Phosphate blend	70,000 Lbs	_____	_____
Fluorosilicic Acid	30 Tons	_____	_____
Liquid Chlorine	75 Tons	_____	_____
Sulfur Dioxide	9,000 Lbs	_____	_____
Ferric Chloride	100,000 Gals	_____	_____
Powdered Act Carbon(50 lb max bag)	25,000 Lbs	_____	_____
Powdered Act Carbon(35 lb max bag)	25,000 Lbs	_____	_____

Signature \_\_\_\_\_

Company \_\_\_\_\_

Mailing Address \_\_\_\_\_

City State Zip

Phone Number \_\_\_\_\_

Acceptance by City of Bismarck:

\_\_\_\_\_  
President, Board of City Commissioners

Attest: \_\_\_\_\_  
City Administrator

Date: \_\_\_\_\_

